

**APPLICATION FOR CERTIFICATION (AFC)**  
**SOUTH STAR COGENERATION PROJECT**  
**KERN COUNTY, CALIFORNIA**

**VOLUME I - TEXT**

Prepared for:

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# TABLE OF CONTENTS

	<b>Page</b>
<b>1.0 EXECUTIVE SUMMARY .....</b>	<b>1-1</b>
<b>1.1 Introduction .....</b>	<b>1-1</b>
1.1.1 South Star I.....	1-2
1.1.2 South Star II .....	1-2
1.1.3 Environmental Benefits.....	1-3
1.1.4 Regulatory Framework.....	1-3
<b>1.2 Project Ownership.....</b>	<b>1-4</b>
<b>1.3 Demand Conformance .....</b>	<b>1-4</b>
<b>1.4 Project Schedule .....</b>	<b>1-5</b>
<b>1.5 Facility Location and Description.....</b>	<b>1-5</b>
1.5.1 Location of South Star I and II Sites .....	1-5
1.5.2 Facility Description .....	1-6
1.5.3 Site Layouts.....	1-7
1.5.4 Transmission Interconnection .....	1-8
1.5.5 Fuel Supply .....	1-8
1.5.6 Water Supply.....	1-9
1.5.7 Steam Distribution.....	1-9
1.5.8 Waste Handling and Control .....	1-9
1.5.9 Wastewater Line.....	1-10
1.5.10 Site Access .....	1-10
1.5.11 Facility Closure .....	1-10
<b>1.6 Plant Operation .....</b>	<b>1-11</b>
<b>1.7 Safety .....</b>	<b>1-11</b>
<b>1.8 Environmental Considerations .....</b>	<b>1-11</b>
1.8.1 Air Quality.....	1-12
1.8.2 Biological Resources.....	1-13
1.8.3 Cultural Resources .....	1-14
1.8.4 Land Use .....	1-15
1.8.5 Noise.....	1-16
1.8.6 Public Health.....	1-16
1.8.7 Worker Health and Safety .....	1-17
1.8.8 Socioeconomics.....	1-18
1.8.9 Agriculture and Soils.....	1-19
1.8.10 Traffic and Transportation .....	1-19
1.8.11 Visual Resources .....	1-19
1.8.12 Hazardous Materials Handling.....	1-20
1.8.13 Waste Management .....	1-21
1.8.14 Water Resources.....	1-21

## TABLE OF CONTENTS (Continued)

	Page
1.8.15 Geologic Resources and Hazards .....	1-22
1.8.16 Paleontologic Resources .....	1-22
<b>1.9 Summary .....</b>	<b>1-22</b>
 <b>2.0 PROJECT DESCRIPTION .....</b>	 <b>2-1</b>
<b>2.1 Introduction .....</b>	<b>2-1</b>
2.1.1 South Star I.....	2-1
2.1.2 South Star II .....	2-2
2.1.3 Environmental Benefits.....	2-3
2.1.4 Regulatory Framework.....	2-3
<b>2.2 South Star Project Description, Design, and Operation.....</b>	<b>2-4</b>
2.2.1 Site Arrangement and Layout .....	2-5
2.2.2 Process Description .....	2-6
2.2.3 Combustion Turbine Generators and Heat Recovery Steam Generators .....	2-7
2.2.4 Major Electrical Equipment and Systems .....	2-9
2.2.5 South Star Utility Interconnections .....	2-12
2.2.6 Water Supply and Use.....	2-14
2.2.7 Waste Management .....	2-15
2.2.8 Management of Hazardous Materials .....	2-17
2.2.9 Emission Control and Monitoring.....	2-18
2.2.10 Fire Protection .....	2-20
2.2.11 Plant Auxiliaries.....	2-20
2.2.12 Interconnect to Transmission Line.....	2-23
2.2.13 Civil/Structural Features .....	2-24
2.2.14 Transmission Facilities.....	2-27
2.2.15 Project Construction.....	2-28
2.2.16 Plant Operation.....	2-29
<b>2.3 Facility Safety Design Standards .....</b>	<b>2-29</b>
2.3.1 Natural Hazards.....	2-30
2.3.2 Emergency Systems and Safety Precautions.....	2-30
2.3.3 Personnel Safety Program .....	2-31
2.3.4 Facility Reliability.....	2-31
2.3.5 Plant Availability.....	2-31
2.3.6 Redundancy of Critical Components .....	2-32
2.3.7 Fuel Availability.....	2-32
2.3.8 Water Availability .....	2-32
2.3.9 Project Quality Control .....	2-33

**TABLE OF CONTENTS**  
**(Continued)**

	<b>Page</b>
<b>2.4</b>	<b>Laws, Ordinances, Regulations, and Standards.....2-34</b>
<b>2.5</b>	<b>Potential Cumulative Impacts.....2-34</b>
<b>2.6</b>	<b>Potential Indirect Effects.....2-34</b>
<b>3.0</b>	<b>DEMAND CONFORMANCE .....3-1</b>
<b>4.0</b>	<b>FACILITY CLOSURE.....4-1</b>
<b>4.1</b>	<b>Temporary Closure.....4-1</b>
<b>4.2</b>	<b>Permanent Closure.....4-2</b>
<b>5.0</b>	<b>PROJECT ALTERNATIVES.....5-1</b>
<b>5.1</b>	<b>No Project.....5-1</b>
<b>5.2</b>	<b>Alternative Site Locations .....5-2</b>
5.2.1	South Star I.....5-3
5.2.2	South Star II .....5-3
5.2.3	Existing South Midway Steam Plant.....5-4
5.2.4	Existing Section 21 Steam Plant .....5-4
<b>5.3</b>	<b>Alternative Project Configurations .....5-4</b>
5.3.1	Combustion Turbine Generators .....5-5
5.3.2	Heat Recovery Steam Generators .....5-6
5.3.3	Alternate Fuels .....5-6
5.3.4	Alternative Cycles .....5-7
5.3.5	Preferred Project Configuration .....5-8
<b>5.4</b>	<b>Alternative Transmission Routes.....5-8</b>
<b>5.5</b>	<b>Alternative Natural Gas Supply.....5-11</b>
<b>6.0</b>	<b>ELECTRIC TRANSMISSION .....6-1</b>
<b>6.1</b>	<b>Transmission Line Engineering .....6-1</b>
6.1.1	Existing Facilities.....6-1
6.1.2	South Star Transmission Line .....6-1
6.1.3	Applicable Regulations .....6-3

## TABLE OF CONTENTS (Continued)

	Page
<b>6.2 Transmission Line Electrical Effects.....</b>	<b>6-3</b>
6.2.1 Project Characteristics .....	6-3
6.2.2 Aviation Safety.....	6-5
6.2.3 Audible Noise and Radio/TV Interference.....	6-6
6.2.4 Electric and Magnetic Fields.....	6-8
6.2.5 Induced Current and Voltages.....	6-13
6.2.6 Fire Hazards .....	6-14
6.2.7 Applicable LORS .....	6-15
6.2.8 Systems Feasibility Study Conclusion .....	6-15
 <b>7.0 NATURAL GAS SUPPLY .....</b>	 <b>7-1</b>
 <b>8.0 ENVIRONMENTAL IMPACT</b>	
 <b>8.1 Air Quality .....</b>	 <b>8.1-1</b>
8.1.1 Laws, Ordinances, Regulations, and Standards .....	8.1-3
8.1.2 Affected Environment .....	8.1-9
8.1.3 Best Available Control Technology.....	8.1-14
8.1.4 Environmental Consequences .....	8.1-15
8.1.5 Commissioning Activities.....	8.1-30
8.1.6 Potential Indirect and Cumulative Impacts .....	8.1-32
8.1.7 Emission Offsets and Project Mitigation Techniques .....	8.1-34
8.1.8 Compliance with Laws, Ordinances, Regulations, and Standards .....	8.1-36
8.1.9 Proposed Conditions of Certification.....	8.1-36
8.1.10 Agency Contacts .....	8.1-36
8.1.11 References .....	8.1-37
 <b>8.2 Biological Resources.....</b>	 <b>8.2-1</b>
8.2.1 Applicable Laws, Ordinances, Regulations, and Standards.....	8.2-2
8.2.2 Affected Environment .....	8.2-4
8.2.3 Biological Survey.....	8.2-7
8.2.4 Environmental Consequences .....	8.2-9
8.2.5 Proposed Conditions of Certification.....	8.2-14
8.2.6 Cumulative and Indirect Impacts .....	8.2-14
8.2.7 Other Required Permits/Approvals .....	8.2-16
8.2.8 Agency Contacts .....	8.2-16
8.2.9 LORS Conformance.....	8.2-16
8.2.10 References .....	8.2-16

## TABLE OF CONTENTS (Continued)

	Page
<b>8.3 Cultural Resources.....</b>	<b>8.3-1</b>
8.3.1 Affected Environment .....	8.3-3
8.3.2 Environmental Consequences .....	8.3-24
8.3.3 Mitigation Measures.....	8.3-35
8.3.4 LORS Compliance: Applicable Laws, Ordinances, Regulations, and Standards .....	8.3-38
8.3.5 Applicable Permits .....	8.3-42
8.3.6 References Cited .....	8.3-42
<b>8.4 Land Use.....</b>	<b>8.4-1</b>
8.4.1 Affected Environment .....	8.4-3
8.4.2 Land Use Plans and Policies .....	8.4-4
8.4.3 Description of South Star I and II and Its Components .....	8.4-8
8.4.4 Environmental Consequences .....	8.4-16
8.4.5 Potential Cumulative Impacts .....	8.4-25
8.4.6 Unavoidable Adverse Impacts .....	8.4-26
8.4.7 Agency Contacts .....	8.4-26
8.4.8 LORS Compliance .....	8.4-27
8.4.9 References .....	8.4-27
<b>8.5 Noise.....</b>	<b>8.5-1</b>
8.5.1 Applicable Laws, Ordinances, Regulations, and Standards.....	8.5-2
8.5.2 Affected Environment .....	8.5-3
8.5.3 Environmental Consequences .....	8.5-6
8.5.4 Mitigation Measures.....	8.5-9
8.5.5 Involved Agencies and Agency Contacts.....	8.5-9
8.5.6 Permits Required and Permit Schedule.....	8.5-10
8.5.7 References .....	8.5-10
<b>8.6 Public Health .....</b>	<b>8.6-1</b>
8.6.1 Affected Environment .....	8.6-2
8.6.2 Laws, Ordinances, Regulations, and Standards .....	8.6-3
8.6.3 Environmental Consequences .....	8.6-4
8.6.4 Other Public Health Risks .....	8.6-11
8.6.5 Agency Contacts .....	8.6-16
8.6.6 Compliance with Laws, Ordinances, Regulations, and Standards .....	8.6-16
8.6.7 References .....	8.6-16
<b>8.7 Worker Health and Safety.....</b>	<b>8.7-1</b>
8.7.1 Affected Environment .....	8.7-2
8.7.2 Laws, Ordinances, Regulations, and Standards .....	8.7-2
8.7.3 Occupational Safety and Health.....	8.7-2
8.7.4 Safety Training Programs.....	8.7-14
8.7.5 Permitting Agencies .....	8.7-15

## TABLE OF CONTENTS (Continued)

	Page
8.7.6	Permitting Contacts ..... 8.7-16
8.7.7	Permitting Schedule ..... 8.7-16
8.7.8	Agency Contacts ..... 8.7-16
8.7.9	Proposed Conditions of Certification..... 8.7-16
8.7.10	Cumulative Effects..... 8.7-16
8.7.11	References ..... 8.7-17
<b>8.8</b>	<b>Socioeconomics ..... 8.8-1</b>
8.8.1	Laws, Ordinances, Regulations, and Standards ..... 8.8-2
8.8.2	Affected Environment ..... 8.8-3
8.8.3	Environmental Consequences ..... 8.8-21
8.8.4	Agency Contacts ..... 8.8-30
8.8.5	Compliance with Laws, Ordinances, Regulations, and Standards ..... 8.8-31
8.8.6	References ..... 8.8-31
<b>8.9</b>	<b>Agricultural and Soils ..... 8.9-1</b>
8.9.1	Affected Environment ..... 8.9-2
8.9.2	Environmental Effects..... 8.9-2
8.9.3	Mitigation ..... 8.9-12
8.9.4	Applicable Laws, Ordinances, Regulations, and Standards.... 8.9-13
8.9.5	Involved Agencies and Agency Contacts..... 8.9-16
8.9.6	Permits Required and Permit Schedule ..... 8.9-16
8.9.7	References ..... 8.9-17
<b>8.10</b>	<b>Traffic and Transportation ..... 8.10-1</b>
8.10.1	Laws, Ordinances, Regulations and Standards ..... 8.10-2
8.10.2	Affected Environment ..... 8.10-3
8.10.3	Environmental Consequences ..... 8.10-6
8.10.4	Mitigation Measures..... 8.10-14
8.10.5	Involved Agencies and Contacts ..... 8.10-15
8.10.6	Compliance with Laws, Ordinances, Regulations, and Standards (LORS)..... 8.10-15
8.10.7	References ..... 8.10-16
<b>8.11</b>	<b>Visual Resources..... 8.11-1</b>
8.11.1	Laws, Ordinances, Regulations, and Standards ..... 8.11-2
8.11.2	Affected Environment ..... 8.11-3
8.11.3	Environmental Consequences ..... 8.11-7
8.11.4	Cumulative Impacts..... 8.11-13
8.11.5	Mitigation Measures..... 8.11-14
8.11.6	Agency Contacts ..... 8.11-14
8.11.7	Schedule of Other Required Permits/Approvals ..... 8.11-14
8.11.8	References ..... 8.11-15

## TABLE OF CONTENTS (Continued)

	Page
<b>8.12 Hazardous Materials Handling.....</b>	<b>8.12-1</b>
8.12.1 Laws, Ordinances, Regulations, and Standards .....	8.12-2
8.12.2 Affected Environment .....	8.12-5
8.12.3 Potential Environmental and Human Health Effects .....	8.12-6
8.12.4 Offsite Consequence Analysis .....	8.12-11
8.12.5 Fire and Explosion Risk .....	8.12-19
8.12.6 Proposed Mitigation Measures.....	8.12-21
8.12.7 Proposed Conditions of Certification.....	8.12-23
8.12.8 Cumulative Impacts.....	8.12-24
8.12.9 Involved Agencies and Contacts .....	8.12-24
8.12.10 Laws, Ordinances, Regulations, and Standards Summary Table .....	8.12-24
8.12.11 References .....	8.12-25
<b>8.13 Waste Management.....</b>	<b>8.13-1</b>
8.13.1 Environmental Condition of Site.....	8.13-2
8.13.2 Waste Generation, Storage, and Handling .....	8.13-2
8.13.3 Waste Disposal Sites .....	8.13-6
8.13.4 Waste Disposal Impacts .....	8.13-10
8.13.5 Waste Mitigation Measures.....	8.13-11
8.13.6 Facility Closure .....	8.13-11
8.13.7 Cumulative Impacts.....	8.13-13
8.13.8 Monitoring.....	8.13-13
8.13.9 Laws, Ordinances, Regulations, and Standards .....	8.13-14
8.13.10 Involved Agencies.....	8.13-18
8.13.11 Waste Management Permits Required .....	8.13-18
8.13.12 References .....	8.13-18
<b>8.14 Water Resources.....</b>	<b>8.14-1</b>
8.14.1 Affected Environment .....	8.14-2
8.14.2 Environmental Consequences .....	8.14-6
8.14.3 Cumulative Water Resources Impacts .....	8.14-11
8.14.4 Mitigation Measures and Proposed Conditions .....	8.14-11
8.14.5 Applicable Laws, Ordinances, Regulations, and Standards..	8.14-12
8.14.6 LORS Compliance Strategy .....	8.14-16
8.14.7 Involved Agencies and Agency Contacts.....	8.14-16
8.14.8 References .....	8.14-17
<b>8.15 Geologic Resources and Hazards.....</b>	<b>8.15-1</b>
8.15.1 Affected Environment .....	8.15-2
8.15.2 Geologic Effects and Hazards .....	8.15-18
8.15.3 Mitigation Measures.....	8.15-24
8.15.4 Proposed Conditions of Certification.....	8.15-25
8.15.5 Laws, Ordinances, Regulations, and Standards .....	8.15-25



## TABLE OF CONTENTS (Continued)

		Page
8.15.6	Involved Agencies and Agency Contacts.....	8.15-25
8.15.7	Permits Required and Permit Schedule.....	8.15-25
8.15.8	References .....	8.15-25
<b>8.16</b>	<b>Paleontological Resource .....</b>	<b>8.16-1</b>
8.16.1	Affected Environment .....	8.16-3
8.16.2	Environmental Consequences .....	8.16-21
8.16.3	Mitigation Measures.....	8.16-22
8.16.4	Applicable Laws, Ordinances, Regulations, and Standards..	8.16-25
8.16.5	References .....	8.16-27
<b>9.0</b>	<b>Engineering.....</b>	<b>9-1</b>

## APPENDICES

Appendix A	Electric Transmission
Appendix B	Air Quality
Appendix C	Biological Resources
Appendix D	Cultural Resources (Confidential)
Appendix E	Land Use
Appendix F	Public Health
Appendix G	Environmental Site Assessment
Appendix H	Paleontologic Resource Inventory/Impact Assessment Report (Confidential)
Appendix I	Engineering
Appendix J	List of Contributors
Appendix K	Changes to Conditions Of Certification

## LIST OF TABLES

2-1	Estimated Average and Peak Daily Water Requirements (gpm) (Per Site)
2-2	Expected Wastewater Quality — Discharged Through TCI Utility Corridor to Valley Waste
2-3	Project Schedule Major Milestones South Star I
2-4	Total Daily Construction-Related Vehicle Trip Generation* (Per Site)
2-5	Major Equipment Redundancy (Per Site)
6-1	Design and Construction LORS
6-2	Fire Hazard LORS
6-3	Hazardous Shock LORS
6-4	Jurisdiction
6-5	State Regulatory Requirements on Electric and Magnetic Fields
6-6	Aviation Safety LORS
6-7	Fire Hazard LORS
6-8	Communication Interference LORS
7-1	Natural Gas Fuel Properties
8.1-1	Relevant Federal and California Ambient Air Quality Standards
8.1-2	Federal and State Attainment Status for Western Kern County
8.1-3	Temperature, Relative Humidity, and Precipitation Data for Bakersfield, California
8.1-4	Ambient Air Quality Data from ARB and Westside Operators Monitoring Station
8.1-5	Summary of Ambient Data for Ozone
8.1-6	Summary of Ambient Data for PM <sub>10</sub>
8.1-7	Summary of Ambient Data for Carbon Monoxide (CO)
8.1-8	Summary of Ambient Data for Nitrogen Dioxide (NO <sub>2</sub> )
8.1-9	Summary of Ambient Data for Sulfur Dioxide (SO <sub>2</sub> )
8.1-10	Summary of South Star Project BACT
8.1-11	Estimated Construction Equipment and Schedule
8.1-12	Estimated Criteria Pollutant Emissions From Construction Equipment (Per Site)
8.1-13	Criteria Pollutant Emission Rates for the South Star Project Turbines and SCR with Ammonia Injection During Normal Operation (pounds per hour)
8.1-14	Annual Emissions for the South Star Project (per facility)
8.1-15	South Star Construction Emissions Scenarios and Release Parameters
8.1-16	Stack Locations for the South Star Project
8.1-17	Stack Exhaust Parameters for the South Star Project Screening Analysis
8.1-18	Screening Analysis Results for South Star I

## **LIST OF TABLES**

**(Continued)**

- 8.1-19 Screening Analysis Results for South Star II
- 8.1-20 South Star I ISCST3 Modeling Results
- 8.1-21 South Star II ISCST3 Modeling Results
- 8.1-22 Commissioning Modeling Analysis Results
- 8.1-23 Modeled Stack Parameters for the Cumulative Impact Analysis
- 8.1-24 Modeled Emission Rates for the Cumulative Impact Analysis
- 8.1-25 Cumulative Modeling Analysis Results
- 8.1-26 Rule 2201 Emission Offset Requirements for the South Star Project
- 8.1-27 Comparison of South Star Project Offset Requirements and Total Banked ERCs Under Consideration
- 8.1-28 Applicable Air Quality Permits or Approvals Required for the South Star Project
  
- 8.1-29 South Star Project Summary of Compliance with Air Quality LORS
- 8.2-1 Special Status Wildlife Species with Potential to Occur Within the South Star Project Area
- 8.2-2 Special Status Plant Species with Potential to Occur Within the South Star Project Area
- 8.2-3 Sensitive Biological Resource Locations, Number of Occurrences, and Their Proximity to the South Star Project Sites
- 8.2-4 Sensitive Biological Resource Locations per Mile Segment, Number of Occurrences and Their Proximity to the Proposed Centerline of the Proposed Natural Gas Line and Combined Line (Kern-Mojave Tie-in to South Star I and II).
- 8.2-5 Sensitive Biological Resource Locations per Mile Segment, Number of Occurrences and Their Proximity to the Proposed Centerline of the Electrical Transmission Line Route
- 8.2-6 Sensitive Biological Resource Locations per Mile Segment, Number of Occurrences and Their Proximity to the Proposed Centerline of the Alternate Route 2 Natural Gas Pipeline
- 8.2-7 Vascular Plants Observed During Biological Surveys Conducted for the South Star Project
- 8.2-8 Wildlife Observed During Biological Surveys Conducted for the South Star Project
- 8.2-9 Estimated Disturbance to Wildlife and Plant Habitats Resulting from Construction of Each of the South Star Project's Proposed Facilities
- 8.2.10 Compensation Acreage
- 8.2.11 South Star Project Summary of LORS and Compliance

## **LIST OF TABLES**

### **(Continued)**

8.3-1	Project Components
8.3-2	Previous Cultural Resource Studies Within the Project Area or Adjacent Study Area
8.3-3	Previously Recorded Archaeological Sites Within 400 to 450-Foot Wide Survey Corridor
8.3-4	Previously Recorded Archaeological Sites Within Adjacent Study Areas (within ¼ mile of project facility)
8.3-5	Newly Recorded Cultural Resources in Project Area
8.3-6	Archaeological Survey Coverage and Field Conditions by Project Component
8.3-7	South Star I and II Cogeneration Project - Summary of LORS and Compliance
8.3-8	Agency Contacts
8.3-9	Applicable Permits
8.4-1	Existing Land Uses in the Study Area
8.4-2	Land Use Plans and Policies Related to the South Star I & II Project Sites
8.4-3	Kern County and San Luis Obispo County General Plan Land Use Designations
8.4-4	Zoning Designations Within the Affected Environment
8.4-5	Zoning Districts Within the Study Area
8.4-6	Landowners Along the Proposed Transmission and Pipeline Routes
8.4-7	General Plan Land Use Designations Within the Study Area
8.4-8	Laws, Ordinances, Regulation, and Standards for Land Use
8.4-9	Schedule of Other Required Permits/Approvals
8.5-1	Noise Laws, Ordinances, Regulations, and Standards
8.5-2	Long-Term Noise Measurement Data Summary
8.5-3	Short-Term Noise Measurement Data Summary (June 11-12, 2001)
8.5-4	Proposed Facility Operating Equipment Modeled (per site)
8.5-5	Maximum Estimated Noise Levels at Sensitive Receptors
8.5-6	Typical Noise Levels From Construction Activities For Industrial Projects
8.6-1	List of AB2588 Air Toxics Potentially Emitted From Operation of Natural-Gas-Fired Combustion Turbines with SCR
8.6-2	Estimated Air Toxic Emission Factors and Emissions from Operation of Natural-Gas-Fired Combustion Turbines and SCR
8.6-3	Cancer, Chronic, and Acute Risk Factors
8.6-4	Estimated Cancer Risk and Acute and Chronic Total Hazard Indices for the Individual South Star Project Sites

## **LIST OF TABLES**

### **(Continued)**

8.6-5	60 Hz Magnetic Field International and Occupational Exposure Standards
8.6-6	Estimated Cancer Risk and Acute and Chronic Total Hazard Indices for Other Power Projects in the Vicinity of the South Star Project
8.6-7	Sunrise Project Summary of Compliance with Public Health LORS
8.7-1	Worker Health and Safety Laws, Ordinances, Regulations, and Standards
8.7-2	South Star Cogeneration Project Hazard Analysis
8.7-3	Protective Equipment Guide
8.7-4	Example Operations Emergency Action Outline
8.7-5	Construction Training Program
8.7-6	Operations and Maintenance Training Program
8.7-7	Health and Safety Permits
8.8-1	Historical and Projected Population Growth of the South Star Project Study Area
8.8-2	Population Growth Rates in the Project Study Area
8.8-3	Demographic Profiles for Cities Surrounding the South Star Project (with percentages)
8.8-4	Poverty Levels for Selected Cities in the Study Area
8.8-5	Demographic Profile
8.8-6	Employment in the Study Area, May 2001
8.8-7	Labor Force and Industry Employment for Bakersfield MSA (Kern County)
8.8-8	Construction Personnel Requirements by Trade (Per Site)
8.8-9	Construction Personnel Cost by Craft (Per Site)
8.8-10	Project Plant Operating Labor Requirements (Per Site)
8.8-11	Distribution of Sales Tax During South Star Project Construction
8.8-12	Housing Estimates in the Project Study Area (as of April 2000)
8.8-13	Schools in the Vicinity of the South Star Project
8.8-14	Cumulative Construction Personnel Months by Month (Estimated)
8.8-15	South Star Project Summary of Compliance with Socioeconomic LORS
8.9-1	Soil Types Identified in the South Star I and II Project Sites by Location
8.9-2	Characteristics of Soil Types in South Star I and II Sites
8.9-3	Laws, Ordinances, Regulations, and Standards for Agricultural and Soil Resource

## **LIST OF TABLES**

**(Continued)**

- 8.10-1 Current Regional Traffic Characteristics on State Highways Serving the Project Vicinity
- 8.10-2 Current Traffic Characteristics on Local Roadways in the Project Area
- 8.10-3 Average Daily Construction Period – Daily Workforce Distribution
- 8.10-4 Peak Construction Period - Daily Workforce Distribution
- 8.10-5 Average Daily and Peak Construction Periods - Daily Workforce Vehicle Trip Generation
- 8.10-6 Peak Construction Period Workforce Traffic Impacts upon State Highways and Local Roads
- 8.10-7 Compliance With Laws, Ordinances, Regulations, and Standards
- 8.11-1 Laws, Ordinances, Regulations, and Standards for Visual Resources
- 8.12-1 Hazardous Materials to be Used in Construction
- 8.12-2 Hazardous Materials Used During Operations at each South Star Project Site
- 8.12-3 Characteristics of Hazardous Materials Used During Operations
- 8.12-4 Occupational Exposure Limits for Airborne Ammonia
- 8.12-5 Other Exposure Limits for Airborne Ammonia
- 8.12-6 Accidental Release Scenario Release Rates and Meteorological Conditions
- 8.12-7 Dispersion Modeling Results
- 8.12-8 Compliance With Laws, Ordinances, Regulations, and Standards
- 8.13-1 Hazardous Wastes Generated During Construction, Per Site
- 8.13-2 Wastewater Stream Compositions
- 8.13-3 Hazardous Wastes Generated during Facility Operations, Per Site
- 8.13-4 Waste Management Laws, Ordinances, Regulations, and Standards
- 8.13-5 Involved Agencies and Agency Contact
- 8-14.1 Average, Maximum Monthly, and 24-Hour Rainfall (inches)
- 8-14.2 Estimated Average Daily Water Requirements (gpm) (Per Site)
- 8.14-3 South Star Project Summary of LORS and Compliance
- 8.15-1 MCE Median (50th percentile) Peak Horizontal Accelerations On Soil
- 8.15-2 Abridged Modified Mercalli Intensity Scale
- 8.15-3 Calculated Peak Ground Acceleration (PGA) with 10% Probability of Exceedance in 50 Years South Star I and II Project Sites
- 8.15-4 Laws, Ordinances, Regulations, and Standards for Geologic Resources and Hazards

## **LIST OF TABLES**

**(Continued)**

- 8.16-1 Survey Coverage by Project Component and Field Conditions
- 8.16-2 South Star I and II Geologic Units Within Project Area
- 8.16-3 South Star I and II Paleontological Sensitivity and Geologic Units
- 8.16-4 LORS Applicable to Paleontological Resources
- 8.16-5 Agency Contacts

## **LIST OF FIGURES**

1-1	South Star Facilities General Location Map
1-2a	Computer Simulation of the South Star I
1-2b	Computer Simulation of the South Star I
2-1	Site Location Map
2-2a	Site Arrangement – South Star I
2-2b	Site Arrangement – South Star II
2-3a	Elevations - South Star I
2-3b	Elevations - South Star II
2-4a	Process Flow Diagram – South Star I
2-4b	Process Flow Diagram – South Star II
2-5a	One-line Diagram of Overall Facility – South Star I
2-5b	One-line Diagram of Overall Facility – South Star II
2-6a	Annual Average Water Mass Balance – South Star I and II
2-6b	Daily Peak Water Mass Balance – South Star I or II
2-7a	Site Grading – South Star I
2-7b	Site Grading – South Star II
6-1	Proposed Single Circuit Tangent Configuration
6-2	Proposed Double Circuit Configuration
6-3	Project One-Line Diagram
6-4	Double Circuit Configuration Audible Noise
6-5	Single Circuit Configuration Audible Noise
6-6	Double Circuit Configuration Radio Interference
6-7	Single Circuit Configuration Radio Interference
6-8	Double Circuit Configuration TVI Total Rain
6-9	Single Circuit Configuration TVI Total Rain
6-10	Double Circuit Configuration Magnetic Field
6-11	Single Circuit Configuration Magnetic Field
6-12	Double Circuit Configuration Electric Field
6-13	Single Circuit Configuration Electric Field
8.1-1	Annual Wind Rose 1992 Fellows
8.1-2	Relevant Ambient Air Quality Monitoring Locations for the South Star Project Site
8.1-3	Structures in Modeling Downwash Analysis – South Star I Plot Plan
8.1-4	Structures in Modeling Downwash Analysis – South Star II Plot Plan



## **LIST OF FIGURES**

### **(Continued)**

8.1-5	Receptor Grid Close In Receptors – South Star I
8.1-6	Receptor Grid All Receptors – South Star I
8.1-7	Receptor Grid Close In Receptors – South Star II
8.1-8	Receptor Grid All Receptors – South Star II
8.1-9	Cumulative Modeling Domain and Sources
8.2-1	CEC Approved Biological Survey Effort
8.2-2	South Star Project 1:6000 Map Locations
8.3-1	Cultural Resources Survey Boundary Map
8.3-2	Ethnography of the South Star Project Area
8.4-1	Zoning Districts in the Area Surrounding South Star
8.4-2	Jurisdictional Boundaries in the Area Surrounding South Star
8.4-3	Existing Land Use in the Area Surrounding South Star
8.4-4	Property Ownership and Assessor Parcel Number in the Area Surrounding South Star
8.5-1	Location of Short-Term and Long-Term Ambient Noise Measurement Sites
8.6-1	Complex Terrain within a 10-Mile Radius of the South Star I & II Power Project Sites (1:24,000 in Appendix F)
8.6-2	Census Tracts and Sensitive Receptors within a 6-Mile Radius of Both South Star I and II Cogeneration Project Sites (1:24,000 in Appendix F)
8.7-1a	Site Arrangement with Fire Protection Equipment – South Star I
8.7-1b	Site Arrangement with Fire Protection Equipment – South Star II
8.8-1	Environmental Justice 6-mile Radius Map (1:24,000 in Appendix F)
8.9-1	Soil Types at the facilities of South Star I and II
8-10.1	Regional Highways and Potential Access Routes
8.11-1	Visual Analysis Photo Location Map
8.11-2a	South Star I Cogeneration Plant Site (Ground View Looking Northwest)
8.11-2b	South Star II Cogeneration Plant Site (Ground View Looking Northwest)
8.11-3a	Photosimulation of South Star I Ground View
8.11-3b	Photosimulation of South Star II Ground View
8.11-4a	Current Photo of South Star I Project Site from SR 33 (KOP-1)
8.11-4b	Current Photo of South Star II Project Site from SR 33 (KOP-2)
8.11-5a	Photosimulation of South Star I Project Site from SR 33 (KOP-1)
8.11-5b	Photosimulation of South Star II Project Site from SR 33 (KOP-2)

## **LIST OF FIGURES**

### **(Continued)**

8.11-6	Current Photo of Morgan Substation from Mocal Road (KOP-3)
8.11-7	Photosimulation of Morgan Substation and New Transmission Line (KOP-3)
8.12-1a	Hazardous and Toxic Materials Locations South Star I
8.12-1b	Hazardous and Toxic Materials Locations South Star II
8.12-2	Ammonia Concentrations at 115°F Ambient Temperature
8.12-3	Ammonia Concentrations at 95°F Ambient Temperature
8.12-4	Ammonia Concentrations at 65°F Ambient Temperature
8.12-5	Accidental Aqueous Ammonia Release – Worst-Case Meteorology
8.12-6	Accidental Aqueous Ammonia Release – Alternative-Case
8.14-1	Drainages in the Area Surrounding South Star
8.14-2	Floodplain Map of Drainage Course Crossings
8.15-1	Geomorphic Features of the South Star I and II Cogeneration Project Area
8.15-2	Quaternary Faults and Historical Seismicity, 1852-2000, Within 100 km of South Star I and II Cogeneration Project Area
8.15-3	Simplified Geologic Section A-A', San Andreas Fault to Kern River Fault.
8.15-4	Generalized Stratigraphic Column in the South Star I and II Project Area
8.15-5	Local Geologic Map
8.16-1	Paleontological Sensitivity Data

## ACRONYMS

AAQS	Ambient Air Quality Standards
AC	alternating current
ACI	American Concrete Institute
AFC	Application for Certification
AIC	Archaeological Information Center of the Southern San Joaquin Valley
AISI	American Iron and Steel Institute
AM	Amplitude modulated
amps	amperes
ANSI/IEEE	American National Standards Institute/Institute of Electrical and Electronic Engineers
AOSC	American Institute of Steel Construction Code
AQMP	Air Quality Management Plan
AQRV	Air Quality Related Values
ARB	Air Resources Board
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASMEB	American Society of Mechanical Engineers Boiler
ASTM	American Society of Testing and Materials
ATC	Authority to Construct
AWS	American Welding Society
AWWA	American Water Works Association
BACT	Best Available Control Technology
BID	buoyancy induced dispersion
BLM	Bureau of Land Management
BMPs	Best Management Practices
Btu	British thermal unit
BTU/scf	British thermal units per square foot
BWRs	boiling water reactors
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
CCCT	combined-cycle combustion turbine
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CEM	continuous emission monitoring
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIHP	California Inventory of Historic Places
CO	carbon monoxide
COE	U.S. Army Corps of Engineers
COI	California-Oregon Interconnect
CPUC	California Public Utilities Commission
CRSI	Concrete Reinforcing Steel Institute
CRTs	cathode ray tubes

## ACRONYMS (Continued)

CSHL	California State Historic Landmarks
CTG	combustion turbine generators
DB $\mu$ V/M	decibels measured at micro volts per meter
dBA	decibels measured using the A-weighted scale
DC	direct current
DOC	Determination of Compliance
DOE	U.S. Department of Energy
EAF	equivalent availability factor
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMFs	electromagnetic fields
EMSS	Electric Market Simulation System
EOP	edge of pavement
EOR	enhanced oil recovery
EPC	engineering, procure, and construction
EPRI	Electric Power Research Institute
ER	Electricity Report
ERC	emission reduction credits
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FERC	Federal Energy Regulation Commission
FM	Frequency modulated
FM	Factory Mutual
fps	feet per second
GE	General Electric
GEP	Good Engineering Practice
GIS	gas insulating substations
GMM	Generator Meter Multiplier
gpd	gallons per day
gpm	gallons per minute
HDPE	high density polyethylene
HHV	higher heating value
HHV	higher heating value
HMBP	Hazardous Materials Business Plan
HRA	health risk assessment
HRSG	heat recovery steam generation
HS	high strength
HTCGRs	high temperature gas cooled reactors
HTW	high-temperature-water
I/O	input/output
IGCC	integrated gasification combined cycle
ISC	Industrial Source Complex

## ACRONYMS

### (Continued)

ISCLT	Industrial source Complex Long-Term
ISCST	Industrial Source Complex Short-Term
ISO	Independent System Operator
Kcmil	Kilo Circular Mills
KGRA	Known Geothermal Resource Area
KRGTC/MJP	Kern River Gas Transmission Company/Mojave Pipeline Company
kV	kilovolt
LADWP	Los Angeles Department of Water and Power
LAER	lowest achievable emission rate
LMFBRs	liquid metal fast breeder reactors
LORS	laws, ordinances, regulations, and standards
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
MACT	maximum achievable control technology
MCCs	motor control centers
mG	milligauss
$\text{mg}/\text{m}^3$	milligrams per cubic meter
msl	mean sea level
MSW	municipal solid waste
MVA	million volt amperes
MW	megawatt
MWh	megawatt hour
NAAMM	National Association of Architectural Metals Manufacturers
NAAQS	National Ambient Air Quality Standards
NACE	National Association of Corrosion Engineers
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Council
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
$\text{NH}_3$	ammonia gas
NHPA	National Historic Preservation Act
NOI	Notice of Intent
$\text{NO}_x$	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NSR	New Source Review
O&M	operation and maintenance
OPGW	fiber optic ground water
OSHA	Occupational Health and Safety Administration
Pb	lead
PCBs	polychlorinated biphenyls

## ACRONYMS (Continued)

PG&E	Pacific Gas & Electric
PL	Public Law
PM	particulate matter
PM <sub>10</sub>	fine particulate matter
PM <sub>2.5</sub>	particulate matter less than 2.5 µm in diameter
ppm	parts per million
ppmv	parts per million by volume
ppmvd	parts per million by volume dry
PRC	Public Resources Code
PSD	prevention of significant deterioration
psf	pounds per square foot
psig	pounds per square inch gauge
PU	per unit (measurement of voltage)
PUC	Public Utilities Commission
PVC	Pressure Vessel Code
PWRs	pressurized water reactors
PX	power exchange
RDF	refuse derived fuel
RI	radio interference
RMP	Risk Management Plan
RO	reverse osmosis
ROCs	reactive organic compounds
s/n	signal to noise ratio
SCE	Southern California Edison
SCR	selective catalytic reduction
SDG&E	San Diego Gas & Electric
SIP	State Implementation Plan
SJVUAPCD	San Joaquin Valley Unified Air Pollution Control District
SNT	American Society of Nondestructive Testing
SO <sub>2</sub>	sulfur dioxide
SPCC	Spill Prevention Control and Counter measures
SSPC	Steel Structures Painting Council
SUS	secondary unit substation
TAC	toxic air contaminants
TCI	Texaco California Inc.
TDS	total dissolved solids
TEPI	Texaco Exploration and Production Inc
TEWAC	totally enclosed water-air cooled
TGGP	Texaco Global Gas and Power
THI	total hazard index
TCI	Texaco Corporation, Inc.
TSP	total suspended particulates
TVI	television interference
U.S. EPA	U.S. Environmental Protection Agency
UBC	Uniform Building Code

## **ACRONYMS**

### **(Continued)**

UHC	unburned hydrocarbons
UPC	Uniform Plumbing Code
USFWS	U.S. Fish and Wildlife Service
V/m	volts per meter
VOC	volatile organic compounds
WSCC	Western System Coordinating Council
WTE	waste-to-energy